

The following Listing of Claims will replace all prior versions, and listings, of claims in the application.

LISTING OF CLAIMS:

1. (Cancelled)
2. (Cancelled)
3. (Currently Amended) A pump driving method comprising:
driving a motor based upon a horse power command value using a discharge pressure-discharge flow characteristic;
carrying out feedback control of a discharge pressure;
driving a pump using the motor;
defining a predetermined value of a pressure, flowing amount, and set horse power as a characteristic values value for a predetermined value of a power voltage, the discharge pressure-discharge flow characteristic being represented by a curved line based on the set horse power on pressure axis and flow axis; and
changing the curved line with the set horse power that is corresponding to a detected value of the power voltage to change the horse power command value in correspondence with a detection value of the power voltage.
4. (Currently Amended) A pump driving method comprising:
driving a motor based upon a command value,
carrying out feedback control of a discharge pressure,
driving a pump using the motor based on whether or not a detected DC voltage of an inverter for supplying a driving voltage to the motor is an ideal DC voltage value of an alternate current power voltage,
changing the command value for the detected DC voltage upon judging that the detected DC voltage is the ideal DC voltage value of the alternate current power voltage, and

maintaining the last changed command value last changed during a period in which the detected DC voltage is the ideal DC voltage value upon judging that the detected DC voltage is not the ideal DC voltage value of the alternate current power voltage.

5. (Currently Amended) A pump driving method comprising:
 - driving a motor based upon a command value,
 - carrying out feedback control of a discharge pressure,
 - driving a pump using the motor based on whether or not a detected DC voltage of an inverter for supplying a driving voltage to the motor is an ideal DC voltage value of an alternate current power voltage,
 - changing the command value for the detected DC voltage upon judging that the detected DC voltage is the ideal DC voltage value of the alternate current power voltage, and
 - maintaining a value of said detected DC voltage used when said command value was last changed during a period in which the detected DC voltage is the ideal DC voltage value upon judging that the detected DC voltage is not the ideal DC voltage value of the alternate current power voltage.

6. (Cancelled)

7. (Cancelled)

8. (Currently Amended) A pump driving apparatus comprising:
 - a motor configured to be driven based upon a horse power command value using discharge pressure-discharge flow characteristic to feedback control a discharge pressure;
 - a pump operatively coupled to the motor; and
 - a characteristic changing section configured to define a predetermined pressure, flowing amount, and set horse power as a characteristic values value for a predetermined power voltage, the discharge pressure-discharge flow characteristic being represented by a curved line based on the set horse power on pressure axis and flow axis.

the characteristic changing section being further configured to change the curved line with the set horse power that is corresponding to a detected value of the power voltage to change the horse power command value in correspondence with a detection value of the power voltage.

9. (Currently Amended) A pump driving apparatus comprising:
a motor configured to be driven based upon a command value to feedback control a discharge pressure,
a pump operatively coupled to the motor, and
judgment section configured to judge whether or not a detected DC voltage of an inverter for supplying a driving voltage to the motor is an ideal DC voltage value of an alternate current power voltage, configured to change the command value for the detected DC voltage upon judging that the detected DC voltage is the ideal DC voltage value of the alternate current power voltage, and configured to maintain the last changed command value last changed during a period in which the detected DC voltage is the ideal DC voltage value upon judging that the detected DC voltage is not the ideal DC voltage value of the alternate current power voltage.

10. (Currently Amended) A pump driving apparatus comprising:
a motor configured to be driven based upon a command value to feedback control a discharge pressure, a pump operatively coupled to the motor, and
judgment section configured to judge whether or not a detected DC voltage of an inverter for supplying a driving voltage to the motor is an ideal DC voltage value of an alternate current power voltage, configured to change the command value for the detected DC voltage upon judging that the detected DC voltage is the ideal DC voltage value of the alternate current power voltage and configured to maintain a value of said detected DC voltage used when said command value was last changed during a period in which the detected DC voltage is the ideal DC voltage value upon judging that the detected DC voltage is not the ideal DC voltage value of the alternate current power voltage.

11. (Previously Presented) The pump driving method as set forth in claim 3, further comprising

decreasing the command value in correspondence with a decreasing amount of the detected power source voltage when the detected power source voltage decreases.

12. (Previously Presented) The pump driving method as set forth in claim 4, wherein

when a condition is continuing for a period equal to or more than first predetermined period of time in which said motor is driven at a rotational speed equal to or less than a first predetermined value and in which rotation speed change of said motor is equal to or less than a second predetermined value, it is judged that the detected DC voltage is the ideal DC voltage value.

13. (Previously Presented) The pump driving apparatus as set forth in claim 8, wherein

the characteristic changing section is configured to decrease the command value in correspondence with a decreasing amount of the detected power source voltage when the detected power source voltage decreases.

14. (Previously Presented) The pump driving apparatus as set forth in claim 9, wherein

when a condition is continuing for a period equal to or more than first predetermined period of time in which said motor is driven at a rotational speed equal to or less than a first predetermined value and in which rotation speed change of said motor is equal to or less than a second predetermined value, said judgement section judges that the detected DC voltage is the ideal DC voltage.